



Chapter 5

Implementation

Plan Vehicle — Background

There are many examples nation-wide of communities, regions, and even states that have implemented watershed-based open space plans. Some examples are:

Public: The Tennessee Valley Authority (TVA), organized in the Great Depression to generate power, improve navigation and reduce flood damage on the Tennessee River. The resultant lakes and dams created open space that now is the core of a popular recreation area. (Tennessee)

Public/Private: A blend of public officials and private groups (land trusts, etc.) working together. The Milwaukee Metropolitan Sanitary District, for instance, is currently working with the Urban Open Space Foundation to create the Lincoln Creek Stewardship Council to promote citizen management of the Lincoln Creek natural resources. It has also started the Greenseams Program seeking to link recreational trails, improve waterways, and preserve natural lands. (Milwaukee, Wisconsin)

Private: Non-profit, private advocates focused solely on a watershed, such as the Chagrin River Watershed Partners (CRWP—Chagrin River, Ohio) The CRWP was incorporated in 1996 to preserve and enhance the Chagrin River and watershed as a high quality natural resource. The CRWP represents a coalition of public and private partners in a four county area.

Greenseams

The Greenseams Program is an innovative project supported by a partnership that includes the Milwaukee Metropolitan Sewerage District, the River Revitalization Foundation and the Wisconsin Department of Natural Resources. Greenseam goals are to reduce flooding risks, protect riverfront land from development and provide increased public access. Greenseams strives to protect the natural drainage system “green infrastructure” in the Milwaukee community in order to reduce the need for costly new “gray infrastructure” construction projects. The philosophy behind Greenseams and other contemporary flooding and pollution reduction efforts is that communities need to examine entire watersheds when planning waterway improvements.

One example of the Greenseams effort is a partnership project to link recreational trails, improve waterways and preserve natural settings along the Milwaukee River. By combining resources, the Greenseams partners can take on larger projects and make greater strides toward accomplishing Greenseams goals than they would without this cooperation.

Sidebar

There are currently a number of public and private bodies in the North Branch watershed working to improve watershed conditions:

Drainage Districts: The state legislature created these public bodies nearly a century ago to improve water flow throughout the North Branch watershed. These districts constructed drainage ditches the length of all three forks to enable the largely agricultural interests at that time to drain bottomlands for farming. Additional side benefits accrued were the perceived reduction in mosquito populations following wetland drainage and the more rapid conveyance of sewage, since many municipalities simply sent their waste to low areas along the valley bottoms.

In today's largely urbanized watershed, the drainage districts ensure that the stream channels remain free of debris for maximum water conveyance and reduction of potential flooding. They also manage several large detention facilities constructed by the U.S. Army Corps of Engineers. Recently the drainage districts have become involved in water quality issues as well, such as streambank restoration and aquatic habitat improvement.

The North Branch drainage districts consist of three-person boards appointed by the County Boards of Lake and Cook Counties, and retain an attorney and engineering firm to carry out their duties. Drainage districts may raise funds for these duties by collecting an assessment based on benefit to landowners in their jurisdictional areas.

Stormwater Management Commission (SMC): Created by Lake County in 1991, SMC is run by a board consisting of six municipal representatives and six Lake County board members. Its main focus is on regulating development via the Watershed Development Ordinance (WDO), reducing and preventing flood damage, fostering water quality improvement projects, and enhancing a county-wide rain gauge network. SMC is also responsible for multi-objective watershed planning in Lake County's 26 subwatersheds.

SMC obtains operating funds through property tax and grants.

Friends of the Chicago River (FOCR): Incorporated in 1979, FOCR is the only organization dedicating its efforts solely to the Chicago River. This private, non-profit group originally focussed all its effort in the immediate Chicago area, but in the last decade has become active in the upper reaches of the North Branch.

Land Trusts: Two major land trusts are active in the watershed. Together, these non-profit organizations have preserved and restored nearly 300 acres of land along the Skokie River and Middle Fork, as well as improving the streams themselves. The Lake Forest Open Lands Association, founded in 1967, holds several hundred acres along the Skokie River and Middle Fork. The Lake Bluff Open Lands Association, founded in 1984, is actively restoring relict prairies and wetlands along the Skokie River.

Forest Preserve Districts: County board members (commissioners) also serve as commissioners on the forest preserve board and control these county agencies. Their mission is to preserve large tracts of open space throughout the county. The Forest Preserve District of Cook County was founded in 1915 and the Lake County Forest Preserve District in 1959. Both hold significant acreage in the North Branch watershed: the Forest Preserve District of Cook County owns 3,401 acres and the Lake County Forest Preserve District owns 1,842 acres. The Lake County Forest Preserve District has restored wetlands, streams and high quality native plant communities at Middlefork Savanna and Prairie Wolf Slough.



Figure 5.1: Middlefork Savanna multi-use gravel trail.

Municipalities and Park Districts: These local governmental bodies work in varying degrees to protect and restore the watershed. In the last decade, significant public funding opportunities have encouraged local governmental participation in streambank stabilization, wetland and upland restoration, and even land purchases along the river in their jurisdictions. The Village of Glenview developed an “Environmentally Significant Areas” zoning classification and has protected a number of open space parcels along the West Fork using this zoning. The Village of Lincolnshire purchased a 63-acre site including the headwaters of the West Fork where they restored 38 acres of floodplain and wetland. The Village of Northbrook undertook a large-scale stream restoration project on the West Fork in their downtown area. Streams and habitat are also being restored by several park district golf courses including Foss Park District, Park District of Highland Park, and Lake Forest Parks and Recreation department.

Private Corporations: Many businesses have undertaken more environmentally-friendly care of their grounds and/or support the work of the North Branch Project. Outstanding large-scale efforts would be the restoration work at Abbott Laboratories, Underwriters Laboratory, and Kraft Foods.



Schools: These bodies are becoming increasingly active in the watershed. Deerfield High School currently has a multi-year effort underway to restore the Middle Fork streambank and floodplain on its campus. In 1998, Lake Forest High School undertook prairie and riverbank restoration along nearly 1000 feet of the Middle Fork. Loyola Academy is restoring prairie, stream and wetland along the West Fork

and is treating runoff using native plantings at their athletic complex constructed on a former landfill in Glenview.

Private Clubs: The Onwentsia Club, a private golf club in Lake Forest, has been a pioneer in restoring prairie to its floodplain grounds along the Skokie River.

Figure 5.2: Deerfield High School students stabilize flood plain terraces constructed along the Middle Fork streambank at the high school.

Plan Vehicle — Suggested Model

Given the complexity of goals and opportunities in the open space plan, as well as the large number of public and private bodies already active in caring for the watershed, the planning committee spent considerable time discussing what type of organization could carry out this plan. On May 21 and June 18, 2003, the committee held facilitated sessions to focus on this issue. Further discussion followed at the September 24, 2003 meeting.

Initial ideas looked at by the planning committee focused on disbanding the drainage districts and forming some type of new umbrella organization to implement the watershed plan. However the committee concluded that such a change would be a long-term proposition due to the necessity of changing state legislation — never a simple or quick task. Thus the planning committee decided that working within the existing governmental structures active in the North Branch was the best approach.

The planning committee identified a number of implementation strategies. Committee members assigned values to these strategies after reviewing and evaluating five subsets of more detailed ratings that looked at better coordination of existing agencies and programs, a broad coalition/partnership approach, the role of land trusts and/or a new governmental authority, and possible avenues to accomplish plan goals.

The following strategies received the highest scores:

- All jurisdictions should adopt the open space plan, with the planning committee taking the lead for implementation. *(26 points)*
- The planning committee should promote better coordination among existing agencies to accomplish the goals of the plan. *(21 points)*
- Drainage districts should be disbanded and a single taxing agency created to address the watershed holistically. *(14 points)*
- Existing public entities should be used, and staff identified within each to carry out parts of the plan. *(14 points)*

The key actions from the discussion of the above four strategies were for the planning committee to:

- Seek immediate commitments from municipalities and other jurisdictions to adopt and implement the open space plan.
- Lead and oversee the plan implementation, and possibly also serve as the conduit for the following specific actions:
 1. Improving the coordination among existing organizations (forest preserve districts, land trusts, park districts, etc.) and partner with them to carry out the plan. The Action Plan recommends that the North Branch Planning Committee organize an open space “Coordinators” group including a person designated from each community and key agency that is responsible for watershed open space planning and implementation.

2. Creating a single taxing authority to provide a funding mechanism to enhance (restore/retrofit) and preserve land through acquisition.

Plan Vehicle — Conclusion

Thus the planning committee itself would, upon completion of the open space plan, reorganize itself into some form of implementation group. The planning committee has to date been coordinating the implementation of the watershed plan and has steered this open space plan. It is therefore the logical group to implement the open space plan.

Doubtless some existing members would feel their work complete and the opportunity would arise for new members interested in accomplishing the open space plan to come forward.

The open space plan also suggests the following as possible additional actions:

1. The planning committee continuing to work with the SMC and FOCR. SMC can be instrumental in accomplishing parts of the plan in Lake County because it already has access to funding, the authority to regulate watershed activities, and the possibility of expanding its land acquisition abilities.
2. The Friends of the Chicago River will be invaluable in privately negotiating land deals and providing private, land trust-based expertise in accomplishing other plan goals, particularly in Cook County where it currently has a greater presence. In addition, a new countywide land trust is being formed in Lake County, and this group (as yet unnamed) can potentially aid in the plan implementation.
3. The planning committee can enlist the help of local citizens to take on the many challenges of the plan—in particular, land acquisition—within each local municipality. These helpful individuals could work closely with their park districts and city/village governments as well.

Estimated Costs

It is difficult to estimate the cost of a project of the magnitude and complexity as the open space plan. For the sake of general discussion, the following items are detailed to act as guideposts towards accomplishing the plan. See the Cost and Implementation Schedule at the end of this chapter for further information.

Land Acquisition Costs: These were factored by taking the total acreage proposed for preservation under the various goals, in particular the lands in the greenways map, totaling the assessor values, and multiplying these figures by three. This is standard practice to arrive at some rough estimate of land values.

No effort was made to break out land values by community, since land prices vary widely throughout the watershed. The open space plan assumes such deals will be negotiated locally by persons knowledgeable of local conditions and motivated to complete a transaction to help their community.

As mentioned in Chapter 4, the bulk of the land proposed for preservation actually falls within the greenways system, per the open space plan's goals of inclusiveness and connectivity. Total acreage of these currently unprotected parcels is:

Lake County	3,570.91
Cook County	1,217.17
WATERSHED TOTAL	4,788.08

In addition there are isolated parcels rated highly for other plan goals outside of the greenway system. These are pieces important for flood storage or protection, for instance, but isolated from the landscape proposed for protection and generally following the North Branch forks. The bulk of this acreage is private clubs (and even a cemetery) recommended for conservation easements.

Lake County	414.23
Cook County	277.54
WATERSHED TOTAL	691.77
GRAND TOTAL	5,479.85

The total assessed value for the roughly 5,500 acres is \$18,884,406; using the commonly-accepted formula of dividing this figure by 0.3333 for Lake County and by 0.16 for Cook County to arrive at actual land values. This yields a figure of \$81,985,147.

A certain amount of this land, however, will not be purchased but rather protected by conservation easements, negotiated over time at (hopefully) little cost. This will be particularly true of private clubs. However there will also be the need to acquire partially open parcels along the greenways, and there is no way of estimating the value of these pieces based on assessors' records. Some but not all can be secured through conservation easements.

It is also very important to note that both the Lake and Cook County assessor records do not include an assessed value for many unprotected parcels. Therefore, the approximate value of these 4,788 acres should be considered extremely conservative.

Land Restoration Costs: At present the general commercial rates for this work, exclusive of earthmoving or other physical alteration of the landscape, are:

- Wetlands: \$4,000–8,000/acre
- Prairies: \$2,000–4,000/acre
- Savanna/Forest (including land clearing and control of resprouting brush and trees): \$3,000–5,000/acre

Streambank Restoration/Grading/Stabilization Costs: These prices vary greatly depending on the work needed. Costs can range between \$30–150/lineal foot of stream edge, depending on the amount of earth removed and/or regraded and the complexity of in-stream stabilization techniques such as coconut logs, a-jacks, and the like.

Trail Construction Costs: These costs also vary widely depending on the type of trail surface used. The following figures are based on an eight-foot (8') wide trail. Narrower trails for hiking only may be the only practical option in some areas, however.

Wood-chip trails are relatively simple, costing about \$20,000/mile. Gravel trails — probably the ideal surface for this project since they are somewhat porous but also stable and firm — can cost up to \$60,000/mile (Figure 5.1). Asphalt trails such as the bicycle paths in the Forest Preserve of Cook County may run \$150,000/mile.

On top of these costs one must figure bridges and culverts. The more “hard” the trail is (a stone or paved surface) the more attention must be paid to proper drainage so the trail does not wash out. Culvert sections are generally \$500 each, installed in place. Bridges can run from \$30,000 to cross minor creeks to \$150,000 to cross the forks themselves. A bridge or tunnel on the Middle Fork under the I-94 extension in Deerfield would cost several million dollars alone.

The open space plan finds that there are approximately 58 miles of existing trails in the watershed. It proposes an additional 127 miles of trails, but much of these will be on existing sidewalks along east-west streets to connect the three forks and also access recreational opportunities outside the watershed. Of the 127 miles of proposed trails, approximately 65 miles of new trails will actually need to be built to augment both existing trails and proposed trails using sidewalks.

These new trails would be mostly gravel, with some asphalt work along railroad and ComEd corridors. If one were to allocate bridges, culverts, and other items (signage, etc.) for the entire project on a per-mile basis, it would not be unreasonable to assume a final trail price of \$100,000/mile, particularly if spread out over an eight-year implementation period as suggested in Table 5.1, following.

FUNDING SOURCES

Existing Funding Sources

Funding sources currently available for both land preservation and land restoration are listed below. Other sources may become available in the future, and some sources may cease to exist.

Land Acquisition — Public Funding

Public Referenda: This technique remains the most frequent and time-tested mechanism in use. There are two outstanding examples of public referenda in the North Branch watershed. The Lake County Forest Preserve District has received



Figure 5.3: Woodchip trail at Melody Farm.



Figure 5.4: Students at the Prairie Wolf Slough Forest Preserve, which was restored with funding from several partner sources.

nearly \$120 million in the last fifteen years through three highly successful public referenda, and over \$10,000,000 of these funds has been expended in the North Branch watershed. In 1986 the Libertyville Township Open Space District passed a referendum raising \$19,000,000 for open space preservation in that township, a small portion of which was used on the western edge of the North Branch watershed.

Individual municipalities and park districts have also had some success in this area. The Village of Winnetka recently received public approval to buy some open space from Loyola University. In the last few years, both the Village of Lincolnshire and the City of Lake Forest won public approval to purchase additional parklands in their communities.

Land and Water Conservation Fund (LWCF): This popular and well-known program, in existence since the mid-1960s, provides funding to public bodies for the acquisition and development of state and local park and recreation areas that guarantee public use in perpetuity. In Illinois, LWCF funds are administered through the Open Space Land Acquisition and Development (OSLAD) program.

Open Lands Trust Fund (OLT): This was a successful four-year program under Illinois Governor Ryan, providing funds for land acquisition. The Lake County Forest Preserve District alone received \$15,000,000 from this effort. However the current governor has yet to renew this program, so its status is currently inactive.

North American Wetlands Conservation Act: Congress passed this act in 1989, in part to support activities under the North American Waterfowl Management Plan. NAWCA aims to conserve wetlands by creating partnerships among public and private organizations and individuals, and has funded over 1,100 projects since 1991. While it is geared towards large-scale efforts, the proximity of the North Branch to the Lake Michigan flyway and the tremendous waterfowl response to wetlands restoration programs in, for example, the Middlefork Savanna might make certain projects eligible for assistance.

Transportation Efficiency Act for the 21st Century (TEA-21): Funds are available from various segments of this program for land acquisition for trails, scenic preservation, and water pollution mitigation, as well as building pedestrian and bicycle trails. The Lake County Department of Transportation has used this program to build several miles of bicycle trails within the North Branch watershed.

U.S. Fish and Wildlife Service (USFWS)

— *North American Wetlands Conservation Account:* This source provides up to \$50,000 per project, providing 50% matching funds for the acquisition, restoration, and enhancement of wetlands.

Land Acquisition — Private Funding

Illinois Clean Energy Community Foundation: This foundation, created by Commonwealth Edison (ComEd), provides funding to charitable organizations, educational institutions, and state and local governments in Illinois. Categories considered for funding are land acquisition, planning efforts leading to land acquisition, restoration of natural areas, and capacity-building assistance for newer and smaller non-profit conservation groups. In 2003 this foundation distributed nearly \$2,000,000 in grants.

Land Trusts: These groups purchase land and provide significant charitable giving (income tax reduction) opportunities for property owners, depending on the land deals structured with such trusts. The largest and oldest land trust in the North Branch watershed is the Lake Forest Open Lands Association. See Chapter 2 for a full discussion of land preservation options available by working with such groups.

Land Restoration/Retrofitting — Public Funding

IEPA Non-Point Source Management Program (Section 319): This has been a very successful program in the North Branch watershed, funding projects from streambank restoration to educational efforts “... to control non-point source pollution (NPS), improve Illinois water resources, and promote the public’s knowledge and awareness of NPS pollution.” 50% matching funds or in-kind services are required.

U.S. Fish and Wildlife Service: There are several programs available for both individuals and organizations:

- *Partners for Wildlife:* This program is specifically geared to private owners who wish to restore wetlands on their property. The projects must fulfill multiple objectives including providing habitat and improving water quality, but the grant program does provide up to 100% funding.
- *Private Stewardship Grants Program:* This program provides assistance to benefit T/E species, particularly grants on private land for habitat restoration. 10% matching funds required.

Pittman-Robertson Act (Federal Aid in Wildlife Restoration Act): Funds for this program come from an excise tax on hunting equipment, and are used for the selection, restoration, and improvement of wildlife habitat. Up to 75% reimbursement is allowed.

U.S. Army Corps of Engineers (USACE):

- *Section 206 Aquatic Ecosystem Restoration:* This program gives the USACE authority to carry out extensive projects if they improve the quality of the environment cost-effectively and are in the public interest. Participants must provide 35% towards the total project cost, and may include land in this calculation.
- *Section 1135 Project Modifications for the Improvement of the Environment:* Money and assistance is available to complete restoration and enhancement work



Figure 5.5: Streambank restoration along the West Fork in Northbrook was partially funded with an IEPA Section 319 grant.

benefiting the public and improving the environment. Grants are up to \$5,000,000, requiring a 35% local cost share as detailed above.

Illinois Department of Natural Resources (IDNR): There are several programs available here:

- *Conservation 2000:* This funding source for habitat restoration and enhancement, administered by the IDNR's Ecosystems Program, has been used by the North Branch Ecosystem Partnership. The program made \$1.4 million in grants in September of 2003, and expects to fund an additional \$2,000,000 in 2004.

Grants are designed to support ecosystem partnerships of local or regional interests. A match is not required but is considered during project evaluation. C2000 funds were used to develop this Watershed Open Space plan.

- *Trail Grant Program:* This program will fund a collection of various trail programs considering acquisition and construction of bicycle paths and facilities. Depending on the grant, up to 50% match is required.
- *Wildlife Preservation Fund, Division of Resource Protection (Small Project Program):* A small program but one that may be helpful for local/neighborhood efforts. Grants of up to \$1000 are provided with no match required (although preferred).
- *Small Projects Fund, Office of Water Resources (OWR):* Up to \$100,000 in grants and technical assistance is available to alleviate locally-significant flooding and drainage problems.



Figure 5.6: The Village of Northbrook engaged multiple partners and funding sources for river restoration in the downtown.

U.S. Department of Agriculture (USDA)/Natural Resources Conservation Service (NRCS)

Programs: There are several potential sources here. These programs are primarily geared to private landowners but may have some application on large farmed corporate tracts in the upper reaches of the watershed.

NRCS

- *Environmental Quality Incentives Program (EQIP):* EQIP offers financial and technical assistance to help eligible parties install or implement structural and management practices on eligible agricultural land. EQIP may cost-share up to 75% of the costs of certain conservation practices.
- *Wetlands Reserve Program (WRP):* WRP offers landowners the chance to establish long-term wildlife practices through the protection, restoration and enhancement of wetlands on their property. Technical and financial assistance is available.
- *Wildlife Habitat Incentives Program (WHIP):* WHIP will provide technical assistance and up to 75% cost-share to establish and improve fish and wildlife habitat under five- to ten-year agreements.

USDA

- *Conservation Reserve Program (CRP):* CRP provides technical and financial assistance to reduce sedimentation in streams and lakes, establish wildlife habitat, and enhance wetlands through the use of wildlife plantings, riparian buffers,

filter strips and the like. Cost-sharing is provided to establish vegetation, and CRP then pays an annual rental cost for the life of the contract.

- *Urban and Community Forest Challenge Cost-Share Program*: This grant may be marginally useful in the watershed, helping to establish and support urban and community forests and forestry activities with up to 50% cost-sharing.

Illinois Department of Agriculture (IDA), Land and Water Division: The Streambank Stabilization and Restoration Program (SSRP) requires a 20–25% match, but provides funding for stabilizing and naturalizing streambanks in urban communities. There is an upper limit on the cost per lineal foot requested.

U.S. Environmental Protection Agency (USEPA): Several funding sources are available with possible application to the North Branch Watershed:

- *Water Pollution Control (106) Program Support*: This provides grants to support the prevention and abatement of surface and groundwater pollution from point and non-point sources. The North Branch Watershed Management and Assessment Plan has identified several pollution “hot spots” in the North Branch that may be eligible for this program.
- *Water Quality Cooperative Agreements (104(b)(3)) Grants*: These provide support for innovative demonstration projects for addressing pollution sources relating to the National Pollutant Discharge Elimination System (NPDES) program.
- *State Wetlands Protection Grants*: This program assists local governments in developing new wetland protection programs. Priorities are wetland/watershed demonstration projects and wetland restoration and conservation; 25% matching funds are required.

Green Illinois Program: This program recently gave grants up to \$125,000 to address environmental issues (including natural areas protection and land and water resources) in a holistic and cooperative manner, and to encourage interaction between government agencies. Unfortunately this program was not funded for 2004.

The Cooperative Endangered Species Conservation Fund (Section 6, Endangered Species Act): Grants are available for conservation projects that conserve listed and non-listed species on state, private, and other non-federal lands.

Land Restoration/Retrofitting — Public/Private Funding

Wetlands Restoration Fund: Funds in this program are generated by developers and others who choose to pay money to mitigate wetlands destroyed for their projects rather than going through the work of doing the mitigation themselves. Corlands, a private, non-profit land entity that is part of the Openlands Project, administers these funds. There is substantial potential backing for qualified projects.

Northeastern Illinois Wetlands Conservation Account: Wetland preservation and restoration funding is available for the North Branch from this source, which is administered jointly by the USFWS and The Conservation Fund, a national land trust.

Natural Resources Conservation Foundation: Grant funding comes from private donations and grants from individuals, businesses and corporations. The Foundation will

enter into cooperative agreements to assist in conservation activities that conserve natural resources on private lands.

National Wildlife Federation Species Recovery Fund: This fund seeks to encourage habitat restorations, species reintroduction, private land conservation activities, and other endeavors directly improving conditions for species listed under the U.S. Endangered Species Act.

Chicago Wilderness Small Grants: Funding is available for natural areas enhancement, education, and research based on the goals and objectives of the Chicago Wilderness Biodiversity Recovery Plan

National Fish and Wildlife Foundation General Matching and Special Grant Program: Eligible projects include habitat restoration and protection on private lands. Grants range from \$3,000 to over \$100,000.

Habitat Restoration Fund for Northeastern Illinois River Watersheds: This fund provides for native plantings and other forms of restoration in both uplands and wetlands. A 25% cost-share is required, and does not allow matching with federal funds.

Land Restoration/Retrofitting/Education — Public Assistance

Lake County Soil and Water Conservation District (LCSWCD) Technical Help: The LCSWCD provides free help to develop conservation plans, provide technical assistance, and create interpretive natural resource information. These efforts might benefit private landowners and private clubs who otherwise might not want governmental involvement.

USDA Watershed Protection and Flood Protection Program (PL 566): This program provides technical and financial assistance for water resource issues on a watershed basis. Projects related to flood mitigation, erosion and sediment control, wetland creation and enhancement, and public recreation are eligible.

Northeastern Illinois Planning Commission — Brownfields Initiative: This is a brand-new initiative offering municipalities within the six-county region (which includes all of the North Branch watershed) a grant opportunity to receive up to \$20,000 in professional time and assistance to generate sustainable design ideas for “brownfield” sites: property the use of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

USEPA Environmental Education Grants Program: This is a good potential source for building public awareness of the watershed. It supports environmental education activities such as developing new classes, training teachers, and designing or demonstrating educational field methods to the public. Awards are given up to \$25,000, with a minimum of 25% of matching funds or in-kind services required.

Private Funding/Assistance — General

Land Trusts: While local land trusts concentrate efforts in their own geographical areas of interest, larger regional land trusts sometimes become involved in projects such as the open space plan. Groups such as The Conservation Fund and The Trust

for Public Land operate on a national scale. Regionally, a group such as the Openlands Project, based in Chicago, may have an interest. These groups can provide facilitating and workshop expertise, and may offer to help organize larger parts of this effort.

Funds are sometimes also available:

- The Conservation Fund announced the **Kodak American Greenways Awards**, small grants to stimulate the planning and design of greenways in communities throughout America.
- The **Illinois Conservation Foundation** also considers programs enhancing wildlife habitat.
- The **Environmental Support Center (ESC)** will provide grants to environmental groups allowing them to hire consultants and trainers improving an organization's operations, administration, and management.
- The **Land Trust Alliance (LTA)** provides a similar service for new land trusts.

Potential Funding Sources

Drainage Districts

Drainage districts can cost-share on watershed work within their statutory purview. Drainage districts assess landowners within the subwatersheds of the three forks of the North Branch for specific maintenance projects such as the removal of brush and logs from the ditches and the stabilization of the streambanks themselves. The drainage districts can also ask the courts for special capital improvement tax assessments.

Drainage districts by statute are also allowed to purchase or own land. Since a majority of the costs of the open space plan are in purchasing and preserving land, it seems reasonable that property owners within the watershed should assist in this vital work as well. The purchase of lands or the securing of conservation and/or drainage easements would dovetail well with the land purchase efforts already in place and in use by the forest preserve districts and local parks and municipalities.

SMC — Fees

The SMC currently is involved in buying and removing residences from flood hazard areas. Such work could be expanded to include lands of conservation interest.

Special North Branch Assessment

An assessment unique to the North Branch watershed might be considered. For instance, in the late 1980s the city of Tulsa, Oklahoma established a stormwater management fee that requires all single family homeowners to pay \$2.95 per month, and businesses to pay according to the amount of impermeable area on their property. This fee generates over \$10,000,000 per year and has been used in part for the acquisition of floodplain lands.

New state legislation would be required to do this. However several attempts to pass such legislation in the mid-1990s failed.

The Community Preservation Fund

In November of 1998 the voters of five towns on eastern Long Island approved a referendum adding a 2% tax to real estate transfers to create a community preservation fund, which is used only for the acquisition and protection of open space and historic properties.

Real Estate Transfer Tax

This is a tax on the sale of property, paid by either the buyer or seller each time a parcel changes ownership. It is fairly “painless” in that it recognizes the value accrued by improving land prices in the watershed, yet is selectively applied only when profit is taken from the watershed. These taxes can also raise substantial funds. The Lake Forest Open Lands Association has used this technique in several of its conservation developments to fund the ongoing restoration and care of the preserved open space.

Special Assessment District

This is a special tax district for an area that would benefit from specific open space or drainage projects, such as a local detention facility in a flood-prone area.

General Obligation Bonds/Revenue Bonds

These are loans taken out by a public body against the value of taxable property, or loans paid from proceeds of a tax levied for the use of a specific public project.

Implementation, Costs, and Schedule

Because of the urgency of development in the North Branch watershed, the following implementation and cost schedule sets a six-year timeline to complete a major part of the needed work by 2012. The actual full cycle is proposed to be ten years, the last four largely devoted to completing land preservation and trail systems.

The main task in the first year of this cycle will be to organize the planning committee to carry out the plan. Subsequent years will focus on carrying out the plan goals.

It should be noted again that federal and state grants and programs might be available for the implementation of this plan. Typically there is a cost-share requirement where salaries and capital dollars can be used as matching funds. Good landowner negotiations can also help reduce the costs of land acquisition, as can the use of conservation easements and other forms of property dedication.

Table 5.1 Implementation and Cost Schedule

Tools	Yearly Costs	Sub Total	Total
Year 1			
Planning			
Expand the planning committee to implement the open space plan, including determining roles for Friends of the Chicago River, SMC, drainage districts, and local municipalities and groups; determine the establishment or expansion of taxing authority Hire a watershed planner/restoration coordinator to help implement changes	Policy changes Staff resources \$50,000	 \$50,000	
Land Acquisition			
Review/prioritize land preservation targets; define costs	Committee time; \$10,000 consultation	\$10,000	
Land Restoration/Retrofitting			
Select five model projects for implementation	Committee and coordinator time		
Watershed Education			
Make municipal presentations for municipalities to adopt plan	Committee and coordinator time		
Begin marketing of trail/greenway plan	Committee and coordinator time		
Develop watershed-based public information/education campaign, including signage/logo ideas for entire greenway system	\$20,000 consultation	\$20,000	
			\$80,000
Year 2			
Planning			
Planning committee up and running; regular meetings	\$50,000 coordinator time	\$50,000	
Land Acquisition			
Begin land negotiations	\$20,000 consultation for legal/pricing work	\$20,000	
Land Restoration/Retrofitting			
Design/Permitting of five model projects	\$75,000 planning and design costs	\$75,000	
Trail/Greenway Work			
Begin planning for first segments of trails	\$50,000 engineering and design costs	\$50,000	
Watershed Education			
Continued outreach/marketing	\$10,000	\$10,000	
			\$205,000
Year 3			
Planning			
Continuing committee work	\$55,000	\$55,000	
Land Acquisition			
Begin land purchases by priority	\$10,250,000	\$10,250,000	
Land Restoration/Retrofitting			
Plan/complete five model projects	\$500,000 restoration costs	\$500,000	
Plan/design additional ten projects	\$100,000 planning and design costs	\$100,000	
Trail/Greenway Work			
Begin trail construction, including signage	\$825,000	\$825,000	
Watershed Education			
Continued outreach/marketing	\$10,000	\$10,000	
			\$11,740,000

Tools	Yearly Costs	Sub Total	Total
Years 4–6			
Planning			
Continuing committee work	\$60,000	\$180,000	
Land Acquisition			
Continue land purchases at year Two/Three rate	\$10,250,000	\$30,750,000	
Land Restoration/Retrofitting			
Complete ten additional projects	\$330,000	\$990,000	
Trail/Greenway Work			
Expand trail construction	\$825,000	\$2,475,000	
Watershed Education			
Continued outreach/marketing	\$10,000	\$30,000	
			\$34,425,000
Years 7–10			
Planning			
Continue Planning Committee work	\$80,000	\$320,000	
Land Acquisition			
Complete land preservation	\$10,250,000	\$41,000,000	
Land Restoration/Retrofitting			
Plan/Complete ten additional projects	\$250,000	\$1,000,000	
Trail/Greenway Work			
Complete trail system	\$825,000	\$3,300,000	
Watershed Education			
Continued outreach/marketing	\$15,000	\$60,000	
			\$45,680,000
GRAND TOTAL FOR ENTIRE PROJECT			\$92,140,000